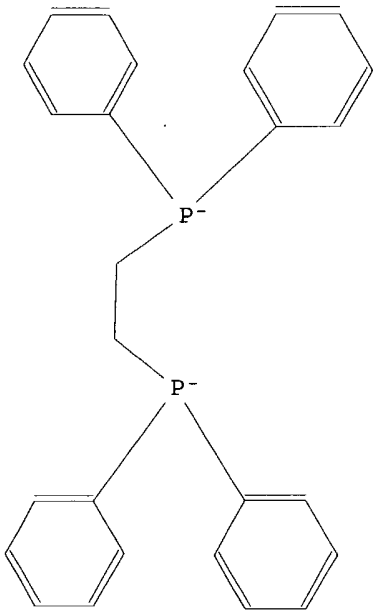
```
     FILE 'CAPLUS' ENTERED AT 13:43:56 ON 05 MAY 2004

     FILE 'REGISTRY' ENTERED AT 13:44:00 ON 05 MAY 2004
L16             1 S   C26 H36 P2/MF AND L15
L17           314 S L15 NOT SI/ELS
L18           219 S L17 AND 2/P
L19           159 S L18 NOT B/ELS
L20           147 S L19 NOT YLIDE?
L21           143 S L20 NOT VINYLENE?
L22            16 S L21 NOT X/ELS
L23           127 S L21 NOT L22

     FILE 'CAPLUS' ENTERED AT 13:47:03 ON 05 MAY 2004
L24            45 S L23/PREP

     FILE 'BEILSTEIN' ENTERED AT 13:48:18 ON 05 MAY 2004

=> s l1 full
FULL SEARCH INITIATED 13:48:30 FILE 'BEILSTEIN'
FULL SCREEN SEARCH COMPLETED -   5833 TO ITERATE

 94.0% PROCESSED    5484 ITERATIONS                                14 ANSWERS

100.0% PROCESSED    5833 ITERATIONS                                17 ANSWERS
SEARCH TIME: 00.00.21

L25            17 SEA SSS FUL L1

=> d ide 17


L25  ANSWER 17 OF 17 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

     Beilstein Records (BRN):          581504
     Lin. Struct. Formula (LSF):       C26H26P2(2-)*2HSe(1-)*Ni(4+)
     Fragm. Molec. Formula (FMF):      C26 H26 P2 , H Se , Ni
     Molecular Formula (MF):           C26 H26 P2 . 2 H Se . Ni
     Molecular Weight (MW):            400.44, 79.97, 58.71
     Fragment BRN (FBRN):              8125885, 8125820, 4921309
     Lawson Number (LN):               16731, 3762
     Compound Type (CTYPE):            isocyclic
     Constitution ID (CONSID):         560230
     Tautomer ID (TAUTID):             580240
     Beilstein Citation (BSO):         5-27
     Entry Date (DED):                 1988/11/28
     Update Date (DUPD):               1990/02/07

     CM   1

     FBRN 8125885
     FMF  C26 H26 P2
```



CM 2

FBRN 8125820
FMF H Se

CM 3

FBRN 4921309
FMF Ni

Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
LSF	Linearized Structure Formula	1
FMF	Fragment Molecular Formula	3
MF	Molecular Formula	1
FW	Formular Weight	3
FBRN	Fragment BRN	3
LN	Lawson Number	2
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
ED	Entry Date	1
UPD	Update Date	1
IR	Infrared Spectrum	1
NMR	Nuclear Magnetic Resonance	1

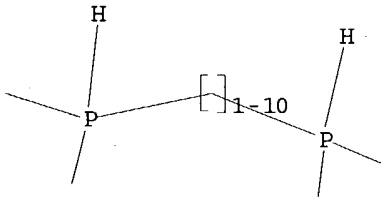
This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	1
RXPRO	Substance is Reaction Product	1

```
=> d his

     (FILE 'HOME' ENTERED AT 13:22:17 ON 05 MAY 2004)

     FILE 'REGISTRY' ENTERED AT 13:22:25 ON 05 MAY 2004
L1             STRUCTURE UPLOADED
L2           0 S L1
L3           4 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 13:23:17 ON 05 MAY 2004
L4           0 S L3
L5           0 S L3

     FILE 'REGISTRY' ENTERED AT 13:23:38 ON 05 MAY 2004
L6             STRUCTURE UPLOADED
L7           0 S L6
L8             STRUCTURE UPLOADED
L9          50 S L8
L10       6662 S L8 FULL
L11       2855 S L10 NOT M/ELS
L12       1232 S L11 NOT O/ELS
L13        582 S L12 NOT  DIYL?
L14        420 S L13 NOT S/ELS
L15        319 S L14 NOT N/ELS

     FILE 'CAPLUS' ENTERED AT 13:43:56 ON 05 MAY 2004

     FILE 'REGISTRY' ENTERED AT 13:44:00 ON 05 MAY 2004
L16          1 S   C26 H36 P2/MF AND L15
L17        314 S L15 NOT SI/ELS
L18        219 S L17 AND 2/P
L19        159 S L18 NOT B/ELS
L20        147 S L19 NOT YLIDE?
L21        143 S L20 NOT VINYLENE?
L22         16 S L21 NOT X/ELS
L23        127 S L21 NOT L22

     FILE 'CAPLUS' ENTERED AT 13:47:03 ON 05 MAY 2004
L24         45 S L23/PREP

     FILE 'BEILSTEIN' ENTERED AT 13:48:18 ON 05 MAY 2004
L25         17 S L1 FULL

=> s l25 not m/els
            0 M/ELS
L26        17 L25 NOT M/ELS

=> d ide


L26  ANSWER 1 OF 17 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

     Beilstein Records (BRN):          9542346
     Lin. Struct. Formula (LSF):       C24H25P(2-)*C18H42P2(2-)*Ni(4+)
     Fragm. Molec. Formula (FMF):      C24 H25 P , C18 H42 P2 , Ni
     Molecular Formula (MF):           C24 H25 P . C18 H42 P2 . Ni
     Molecular Weight (MW):            344.44, 320.48, 58.71
     Fragment BRN (FBRN):              9518207, 9504812, 4921309
     Lawson Number (LN):               16735, 3766, 3762
     Compound Type (CTYPE):            isocyclic
     Constitution ID (CONSID):         8049673
     Tautomer ID (TAUTID):             8948525
     Entry Date (DED):                 2004/01/21
```

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 13:22:42 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1322 TO ITERATE

75.6% PROCESSED 1000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 24259 TO 28621
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

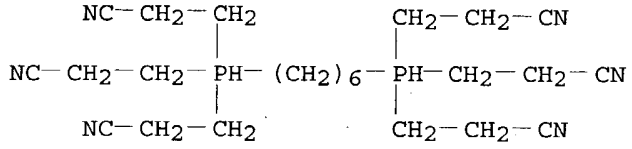
=> s l1 full
FULL SEARCH INITIATED 13:22:47 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 26563 TO ITERATE

100.0% PROCESSED 26563 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

L3 4 SEA SSS FUL L1

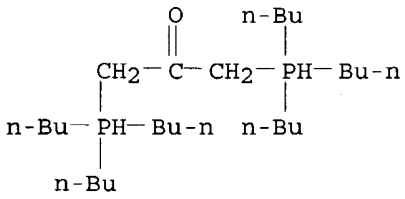
=> d scan

L3 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanenitrile, 3,3',3'',3''',3'''',3''''',3'''''-(1,6-hexanediyldiphosphoranetetrayl)hexakis- (9CI)
MF C24 H38 N6 P2

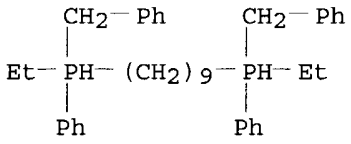


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

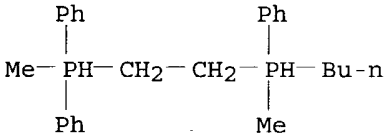
L3 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 2-Propanone, 1,3-bis(tributylphosphoranyl)- (9CI)
MF C27 H60 O P2



L3 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphorane, 1,9-nonanediylbis[ethylphenyl(phenylmethyl)- (9CI)
MF C39 H54 P2



L3 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphorane, butylmethyl[2-(methyldiphenylphosphoranyl)ethyl]phenyl- (9CI)
MF C26 H36 P2



ALL ANSWERS HAVE BEEN SCANNED

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'CAPLUS' ENTERED AT 13:23:17 ON 05 MAY 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

strictly prohibited.

FILE COVERS 1907 - 5 May 2004 VOL 140 ISS 19
FILE LAST UPDATED: 4 May 2004 (20040504/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> s l3
L4   0 L3

=> s l3
L5   0 L3

=> d his

     (FILE 'HOME' ENTERED AT 13:22:17 ON 05 MAY 2004)

     FILE 'REGISTRY' ENTERED AT 13:22:25 ON 05 MAY 2004
L1   STRUCTURE UPLOADED
L2   0 S L1
L3   4 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 13:23:17 ON 05 MAY 2004
L4   0 S L3
L5   0 S L3

=> file reg
COST IN U.S. DOLLARS   SINCE FILE   TOTAL
                                                         ENTRY   SESSION
FULL ESTIMATED COST   0.44   156.07

FILE 'REGISTRY' ENTERED AT 13:23:38 ON 05 MAY 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 4 MAY 2004 HIGHEST RN 679784-15-7
DICTIONARY FILE UPDATES: 4 MAY 2004 HIGHEST RN 679784-15-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

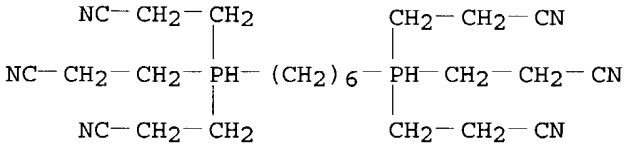
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

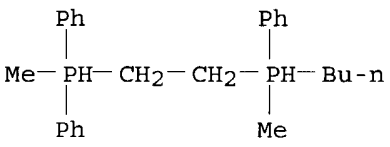
=> d l3 1-4

L3   ANSWER 1 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN   502142-26-9 REGISTRY
CN   Propanenitrile, 3,3',3'',3''',3'''',3''''',3''''''-(1,6-
     hexanediyldiphosphoranetetrayl)hexakis- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN   NSC 222477

MF C24 H38 N6 P2
SR Chemical Library

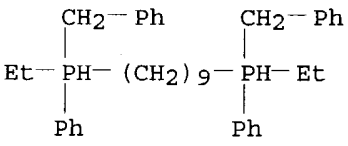


L3 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN 501074-98-2 REGISTRY
CN Phosphorane, butylmethyl[2-(methyldiphenylphosphoranyl)ethyl]phenyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN NSC 193763
MF C26 H36 P2
SR Chemical Library

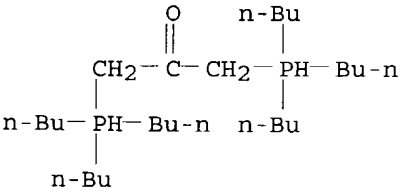


Called STN — not published yet being reviewed by Chem Abs. not correct structure

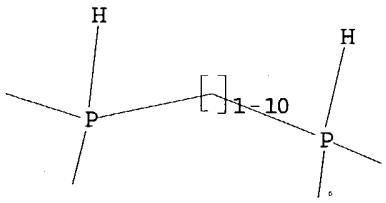
L3 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN 500363-28-0 REGISTRY
CN Phosphorane, 1,9-nonanediylbis[ethylphenyl(phenylmethyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN NSC 116715
MF C39 H54 P2
SR Chemical Library



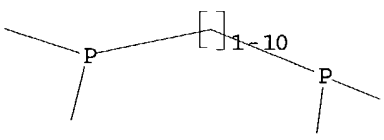
L3 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2004 ACS on STN
RN 500360-49-6 REGISTRY
CN 2-Propanone, 1,3-bis(tributylphosphoranyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN NSC 115685
MF C27 H60 O P2
SR Chemical Library



```
=> file chemical library
'CHEMICAL' IS NOT A VALID FILE NAME
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
ENTER A FILE NAME OR (IGNORE):end

=>
Uploading C:\Program Files\Stnexp\Queries\10743728.str

L6      STRUCTURE UPLOADED

=> d
L6 HAS NO ANSWERS
L6                STR
```




```
Structure attributes must be viewed using STN Express query preparation.


=> s l6
SAMPLE SEARCH INITIATED 13:38:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   1322 TO ITERATE

 75.6% PROCESSED    1000 ITERATIONS                                0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         24259 TO    28621
PROJECTED ANSWERS:                0 TO        0

L7             0 SEA SSS SAM L6

=>
Uploading C:\Program Files\Stnexp\Queries\10743728.str

L8      STRUCTURE UPLOADED

=> d
L8 HAS NO ANSWERS
L8                STR
```




```
Structure attributes must be viewed using STN Express query preparation.
```

=> s l8
SAMPLE SEARCH INITIATED 13:38:43 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1322 TO ITERATE

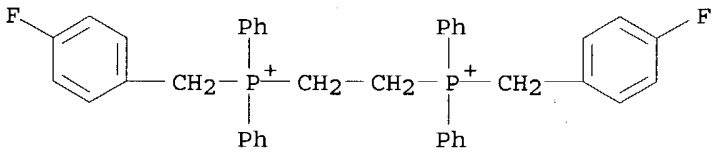
75.6% PROCESSED 1000 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 24259 TO 28621
PROJECTED ANSWERS: 5131 TO 7241

L9 50 SEA SSS SAM L8

=> d scan

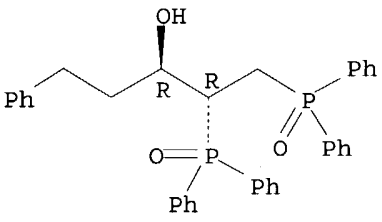
L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, 1,2-ethanediylbis[[(4-fluorophenyl)methyl]diphenyl- (9CI)
MF C40 H36 F2 P2
CI COM



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN erythro-Pentitol, 1,2,4,5-tetradeoxy-1,2-bis(diphenylphosphinyl)-5-phenyl-
(9CI)
MF C35 H34 O3 P2

Relative stereochemistry.

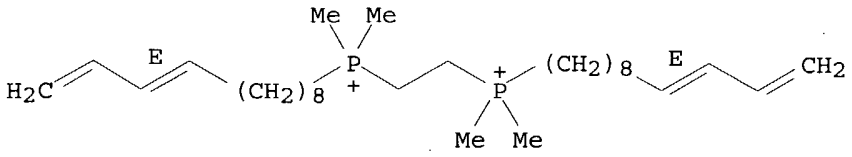


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, 1,2-ethanediylbis[(9E)-9,11-dodecadienyldimethyl-, dibromide,
homopolymer (9CI)
MF (C30 H58 P2 . 2 Br)x
CI PMS

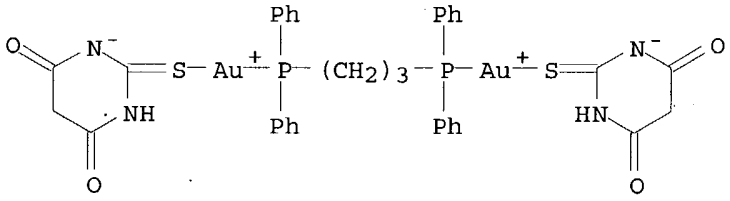
CM 1

Double bond geometry as shown.



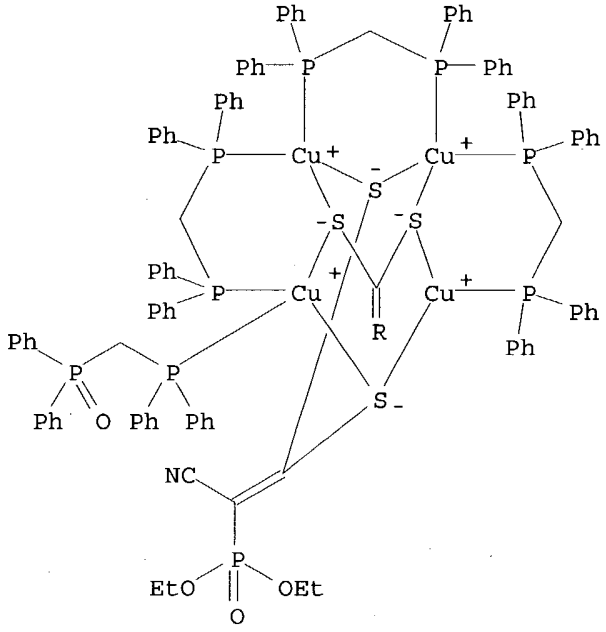
● 2 Br^-

L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Gold, bis[dihydro-2-(thioxo-κS)-4,6(1H,5H)-pyrimidinedionato][μ-[1,3-propanediylbis[diphenylphosphine-κP]]]di- (9CI)
MF C35 H32 Au2 N4 O4 P2 S2
CI CCS, COM

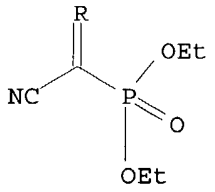


L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Copper, bis[μ4-[diethyl [1-cyano-2,2-di(mercapto-κS:κS)ethenyl]phosphonato(2-)]][[(diphenylphosphino-κP)methyl]diphenylphosphine oxide]tris[μ-[methylenebis[diphenylphosphine-κP]]]tetra- (9CI)
MF C114 H108 Cu4 N2 O7 P10 S4
CI CCS

PAGE 1-A



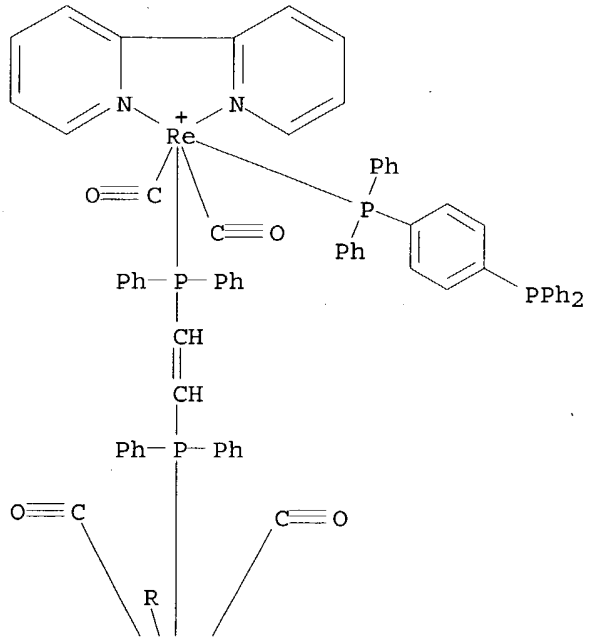
PAGE 2-A



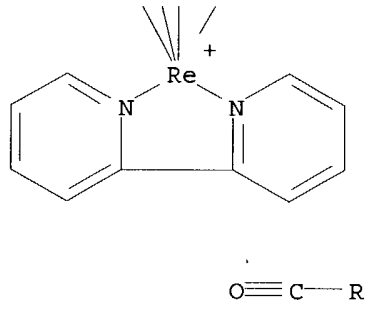
L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Rhenium(2+), bis(2,2'-bipyridine-κN1,κN1')pentacarbonyl[[4-(diphenylphosphino)phenyl]diphenylphosphine-κP][μ-[(1E)-1,2-ethenediylbis[diphenylphosphine-κP]]]di-, stereoisomer, salt with trifluoromethanesulfonic acid (1:2) (9CI)
MF C81 H62 N4 O5 P4 Re2 . 2 C F3 O3 S

CM 1

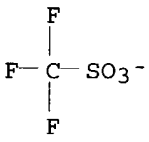
PAGE 1-A



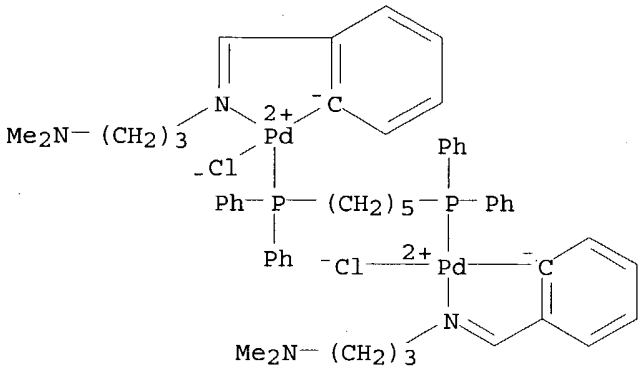
PAGE 2-A



CM 2

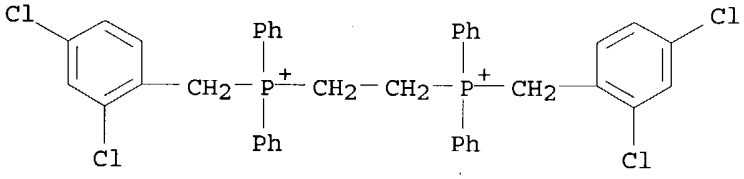


L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Palladium, dichlorobis[2-[[[3-(dimethylamino)propyl]imino-κN]methyl]phenyl-κC][μ-[1,5-pentanediylbis[diphenylphosphine-κP]]]di-, stereoisomer (9CI)
MF C53 H64 Cl2 N4 P2 Pd2
CI CCS

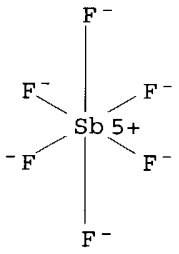


L9 50 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN INDEX NAME NOT YET ASSIGNED
MF C40 H34 Cl4 P2 . 2 F6 Sb

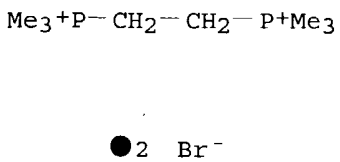
CM 1

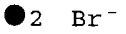


CM 2

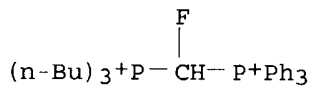


L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, ethylenebis[trimethyl-, dibromide (8CI)
MF **C8 H22 P2 . 2 Br**



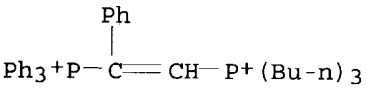


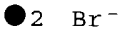
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [fluoro(tributylphosphonio)methyl]triphenyl-, bromide chloride (9CI)
MF **C31 H43 F P2 . Br . Cl**



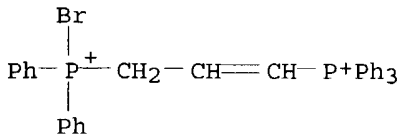
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):20

L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, tributyl[2-phenyl-2-(triphenylphosphonio)ethenyl]-, dibromide (9CI)
MF **C38 H48 P2 . 2 Br**

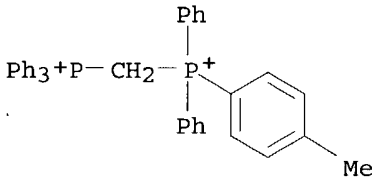




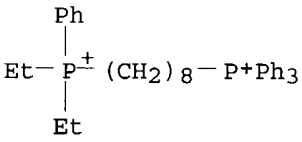
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN P-Bromo-P'-phenyl-P,P'-allylidenebis[diphenylphosphonium bromide] (6CI)
MF **C33 H29 Br P2 . 2 Br**



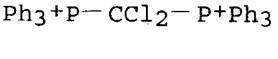
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [[(4-methylphenyl)diphenylphosphonio]methyl]triphenyl-, dibromide (9CI)
MF **C38 H34 P2 . 2 Br**



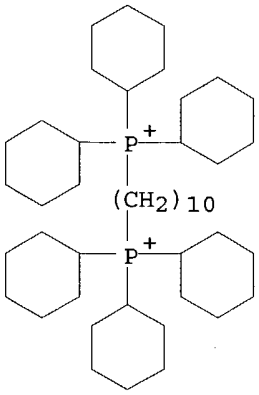
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [8-(diethylphenylphosphonio)octyl]triphenyl-, dibromide (9CI)
MF **C36 H46 P2 . 2 Br**



L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, (dichloromethylene)bis[triphenyl- (9CI)
MF **C37 H30 Cl2 P2**
CI COM



L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Decamethylenebis[tricyclohexylphosphonium bromide] (6CI)
MF **C46 H86 P2 . 2 Br**



● 2 Br^-

L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[trimethyl- (9CI)
MF **C7 H20 P2**
CI COM

$Me_3{}^+P-CH_2-P^+Me_3$

L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[trimethyl-, (pentaiodide) (triiodide) (2:1:3) (9CI)
MF **C7 H20 P2 . 1/2 I5 . 3/2 I3**

CM 1

$Me_3{}^+P-CH_2-P^+Me_3$

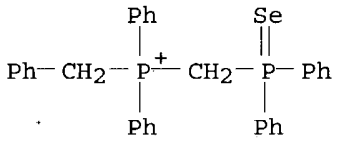
CM 2

$I-I-I^-\!\!-I-I$

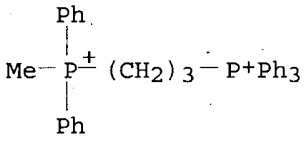
CM 3

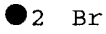
$I-I^-\!\!-I$

L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [(diphenylphosphinoselenoyl)methyl]diphenyl(phenylmethyl)-, bromide (9CI)
MF **C32 H29 P2 Se . Br**

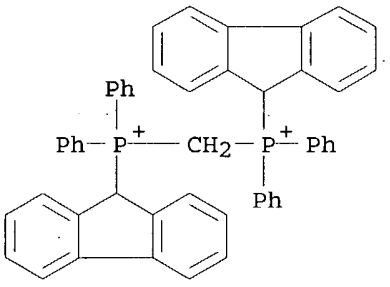


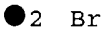
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [3-(methyldiphenylphosphonio)propyl]triphenyl-, dibromide (9CI)
MF **C34 H34 P2 . 2 Br**





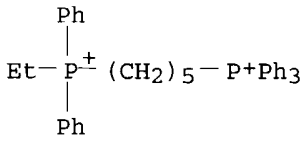
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[9H-fluoren-9-yldiphenyl-, dibromide (9CI)
MF **C51 H40 P2 . 2 Br**

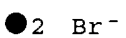




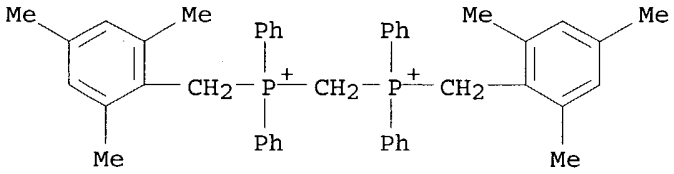
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [5-(ethyldiphenylphosphonio)pentyl]triphenyl-, dibromide (9CI)

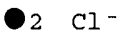
MF **C37 H40 P2 . 2 Br**



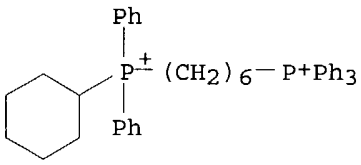


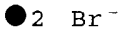
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[diphenyl[(2,4,6-trimethylphenyl)methyl]-, dichloride (9CI)
MF **C45 H48 P2 . 2 Cl**



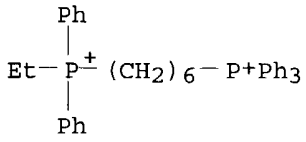


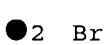
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [6-(cyclohexyldiphenylphosphonio)hexyl]triphenyl-, dibromide (9CI)
MF **C42 H48 P2 . 2 Br**





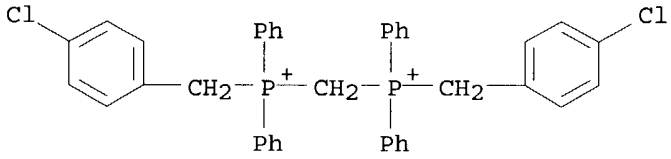
L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [6-(ethyldiphenylphosphonio)hexyl]triphenyl-, dibromide (9CI)
MF **C38 H42 P2 . 2 Br**



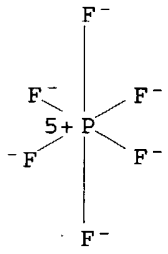


L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[[(4-chlorophenyl)methyl]diphenyl-, bis[hexafluorophosphate(1-)] (9CI)
MF **C39 H34 Cl2 P2 . 2 F6 P**

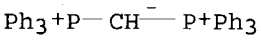
CM 1



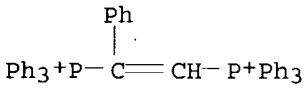
CM 2

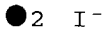


L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, triphenyl-, (triphenylphosphonio)methylide, bromide (9CI)
MF **C37 H31 P2 . Br**

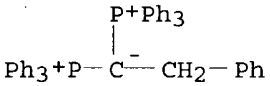


L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, (phenylvinylene)bis[triphenyl-, diiodide (8CI)
MF **C44 H36 P2 . 2 I**

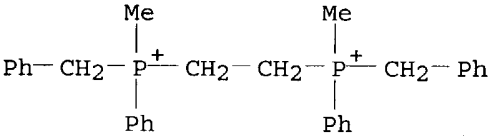


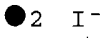


L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, triphenyl-, 2-phenyl-1-(triphenylphosphonio)ethylide, bromide (9CI)
MF **C44 H37 P2 . Br**



L20 147 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, ethylenebis[benzylmethylphenyl-, diiodide (8CI)
MF **C30 H34 P2 . 2 I**

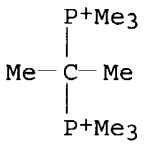




HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

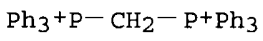
```
=> s l20 not vinylene?
          2989 VINYLENE?
L21        143 L20 NOT VINYLENE?

=> s l21 not x/els
       7388748 X/ELS
L22          16 L21 NOT X/ELS

=> d scan
```

L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, (1-methylethylidene)bis[trimethyl- (9CI)
MF **C9 H24 P2**
CI COM

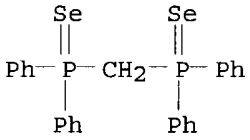


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[triphenyl- (9CI)
MF **C37 H32 P2**
CI COM

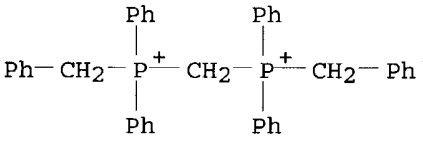


L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphine selenide, methylenebis[diphenyl- (8CI, 9CI)
MF **C25 H22 P2 Se2**
CI COM

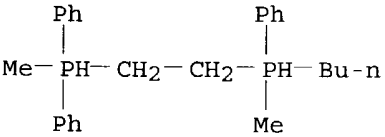


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

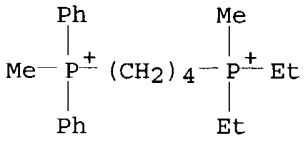
L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[diphenyl(phenylmethyl)- (9CI)
MF **C39 H36 P2**
CI COM



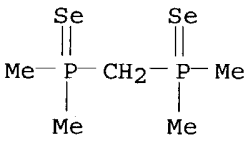
L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphorane, butylmethyl[2-(methyldiphenylphosphoranyl)ethyl]phenyl- (9CI)
MF **C26 H36 P2**



L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, diethylmethyl[4-(methyldiphenylphosphonio)butyl]- (9CI)
MF **C22 H34 P2**

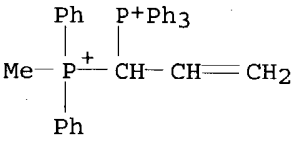


L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphine selenide, methylenebis[dimethyl- (9CI)
MF **C5 H14 P2 Se2**

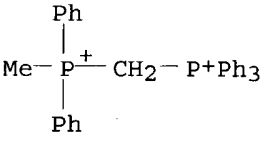


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [1-(methyldiphenylphosphonio)-2-propenyl]triphenyl- (9CI)
MF **C34 H32 P2**
CI COM

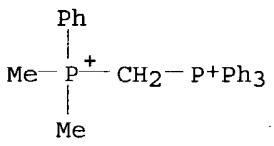


L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [(methyldiphenylphosphonio)methyl]triphenyl- (9CI)
MF **C32 H30 P2**
CI COM

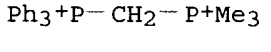


L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [(dimethylphenylphosphonio)methyl]triphenyl- (9CI)
MF **C27 H28 P2**

CI COM



L22 16 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, trimethyl[(triphenylphosphonio)methyl]- (9CI)
MF **C22 H26 P2**
CI COM



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 13:22:17 ON 05 MAY 2004)

FILE 'REGISTRY' ENTERED AT 13:22:25 ON 05 MAY 2004
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 4 S L1 FULL

FILE 'CAPLUS' ENTERED AT 13:23:17 ON 05 MAY 2004
L4 0 S L3
L5 0 S L3

FILE 'REGISTRY' ENTERED AT 13:23:38 ON 05 MAY 2004
L6 STRUCTURE UPLOADED
L7 0 S L6
L8 STRUCTURE UPLOADED
L9 50 S L8
L10 6662 S L8 FULL
L11 2855 S L10 NOT M/ELS
L12 1232 S L11 NOT O/ELS
L13 582 S L12 NOT DIYL?
L14 420 S L13 NOT S/ELS
L15 319 S L14 NOT N/ELS

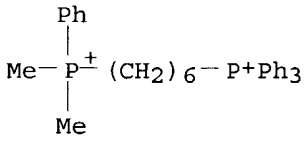
FILE 'CAPLUS' ENTERED AT 13:43:56 ON 05 MAY 2004

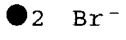
FILE 'REGISTRY' ENTERED AT 13:44:00 ON 05 MAY 2004
L16 1 S C26 H36 P2/MF AND L15
L17 314 S L15 NOT SI/ELS
L18 219 S L17 AND 2/P
L19 159 S L18 NOT B/ELS
L20 147 S L19 NOT YLIDE?
L21 143 S L20 NOT VINYLENE?
L22 16 S L21 NOT X/ELS

=> s l21 not l22
L23 127 L21 NOT L22

=> d scan

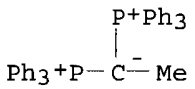
L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [6-(dimethylphenylphosphonio)hexyl]triphenyl-, dibromide (9CI)
MF **C32 H38 P2 . 2 Br**



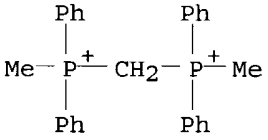


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

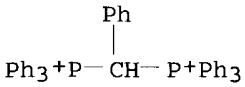
L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, triphenyl-, 1-(triphenylphosphonio)ethylide, iodide (9CI)
MF **C38 H33 P2 . I**



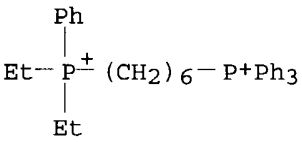
L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[methyldiphenyl-, dibromide (9CI)
MF **C27 H28 P2 . 2 Br**

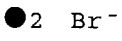


L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, benzylidenebis[triphenyl-, dichloride (8CI)
MF **C43 H36 P2 . 2 Cl**

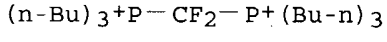


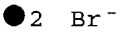
L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [6-(diethylphenylphosphonio)hexyl]triphenyl-, dibromide (9CI)
MF **C34 H42 P2 . 2 Br**



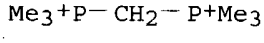


L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, (difluoromethylene)bis[tributyl-, dibromide (9CI)
MF **C25 H54 F2 P2 . 2 Br**

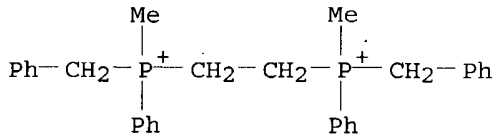




L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[trimethyl-, dibromide (9CI)
MF **C7 H20 P2 . 2 Br**

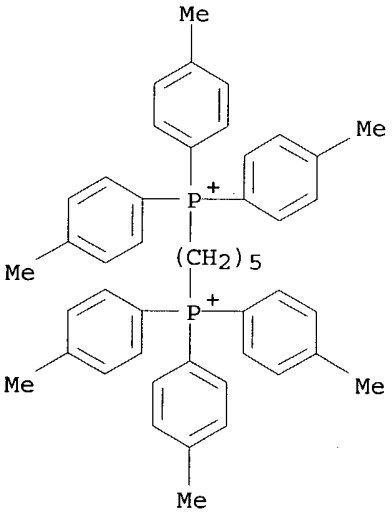


L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, ethylenebis[benzylmethylphenyl-, diiodide (8CI)
MF **C30 H34 P2 . 2 I**



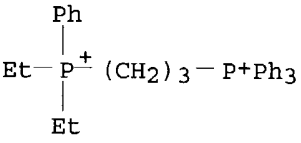
● 2 I^-

L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Pentamethylenebis[tri-p-tolylphosphonium bromide] (6CI)
MF **C47 H52 P2 . 2 Br**



● 2 Br^-

L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, [3-(diethylphenylphosphonio)propyl]triphenyl-, dibromide (9CI)
MF **C31 H36 P2 . 2 Br**



● 2 Br^-

L23 127 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Phosphonium, methylenebis[trimethyl-, diiodide (9CI)
MF **C7 H20 P2 . 2 I**

$Me_3{}^+P-CH_2-P^+Me_3$

●2 I^-

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	34.88	389.90

FILE 'CAPLUS' ENTERED AT 13:47:03 ON 05 MAY 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 5 May 2004 VOL 140 ISS 19
FILE LAST UPDATED: 4 May 2004 (20040504/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l23/prep
63 L23
3143133 PREP/RL
L24 45 L23/PREP
(L23 (L) PREP/RL)

=> d ibib abs hitstr 30-39

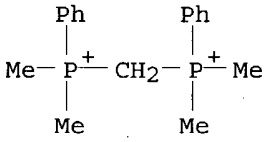
L24 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1978:50976 CAPLUS
DOCUMENT NUMBER: 88:50976
TITLE: Double ylides, I. Synthesis and some properties of hexamethyl- and sym-tetramethyldiphenylcarbodiphosphorane
AUTHOR(S): Schmidbaur, Hubert; Gasser, Oswald; Hussain, M. Sakhawat
CORPORATE SOURCE: Anorg.-Chem. Inst., Tech. Univ. Muenchen, Munich, Fed. Rep. Ger.
SOURCE: Chemische Berichte (1977), 110(11), 3501-7
CODEN: CHBEAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: German
AB Me3P:C:PMe3 was prepared in 62-92% yield by heating Me3P:CHPMe3F with NaH or BuLi. Me3P:CHPMe3F was obtained in 79-87% yields by treating Me3PF2 with Me3P:CH2 or Me3P:CHSiMe3. Heating Me2PPh with CH2Br2 gave 71%

[PhMe2PCH2PMe2Ph]Br2 which on treatment with NaNH2 in THF gave PhMe2P:C:PMe2Ph.

IT **65330-26-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**; RACT (Reactant or reagent)
(preparation and reaction with sodium amide)

RN 65330-26-9 CAPLUS

CN Phosphonium, methylenebis[dimethylphenyl-, dibromide (9CI) (CA INDEX NAME)

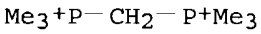


●2 Br^-

IT **57432-17-4P 65330-23-6P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 57432-17-4 CAPLUS

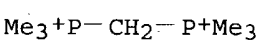
CN Phosphonium, methylenebis[trimethyl-, dichloride (9CI) (CA INDEX NAME)



●2 Cl^-

RN 65330-23-6 CAPLUS

CN Phosphonium, methylenebis[trimethyl-, dibromide (9CI) (CA INDEX NAME)



●2 Br^-

L24 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1976:524046 CAPLUS

DOCUMENT NUMBER: 85:124046

TITLE: A mixed methyl-/phenyl-substituted carbodiphosphorane. Synthesis, reactions, and related compounds

AUTHOR(S): Hussain, M. Sakhawat; Schmidbaur, Hubert

CORPORATE SOURCE: Anorg.-Chem. Inst., Tech. Univ. Muenchen, Munich, Fed. Rep. Ger.

SOURCE: Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie (1976), 31B(6), 721-6
CODEN: ZNBAD2; ISSN: 0340-5087

DOCUMENT TYPE: Journal

LANGUAGE: German

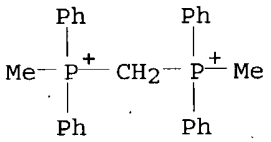
AB Reaction of Ph2PCH2PPh2 with MeBr gave Ph2MeP+CH2P+MePh2 2Br- which on

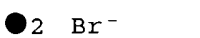
treatment with NaNH2 in THF gave Ph2MeP:C:PMePh2. MeCl with Ph2PCH2PPh2 gave Ph2MeP+CH2PPh2 Cl- which on treatment with excess NaNH2 gave Ph2MeP:CHPPh2.

IT **60798-29-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); **PREP (Preparation)**; RACT (Reactant or reagent)
(preparation and reaction with sodium amide)

RN 60798-29-0 CAPLUS

CN Phosphonium, methylenebis[methyldiphenyl-, dibromide (9CI) (CA INDEX NAME)

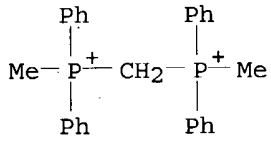


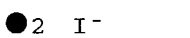


IT **16001-91-5P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 16001-91-5 CAPLUS

CN Phosphonium, methylenebis[methyldiphenyl-, diiodide (8CI, 9CI) (CA INDEX NAME)





L24 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1976:524027 CAPLUS

DOCUMENT NUMBER: 85:124027

TITLE: New, ready degradation reactions of bisphosphines

AUTHOR(S): Nelson, S. Martin; Perks, Maxwell; Walker, Brian J.

CORPORATE SOURCE: Dep. Chem., Queen's Univ. Belfast, Belfast, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1976), (11), 1205-9
CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

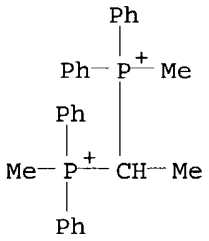
AB 2-Bis(diphenylphosphino)methyl pyridine and its 6-Me derivative (I) on aerial oxidation, quaternization, reaction with Br, or warming with AcOH gave monophosphine derivs. E.g., oxidation of I gave 82% (6-methyl-2-pyridylmethyl)diphenylphosphine oxide. Similar reactions took place with the corresponding Pd(II) complexes. Oxidation with MnO2 and reaction with S gave bis(phosphine oxides) and (sulfides) resp. RCH(PPh2)2 (II; R = H, Me, Ph) generally do not undergo a similar loss of P, although treatment of II (R = Ph) with MeI under more vigorous conditions gave PhCH2P+MePh2 I-. A mechanism involving an increase in coordination at one P atom,

followed by nucleophilic attack at the other is suggested, and the importance of the stability of the leaving carbanion is discussed.

IT **60398-70-1P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 60398-70-1 CAPLUS

CN Phosphonium, ethylidenebis[methyldiphenyl-, diiodide (9CI) (CA INDEX NAME)



●2 I⁻

L24 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1976:504198 CAPLUS
DOCUMENT NUMBER: 85:104198
TITLE: Phosphonium antiparasitics
INVENTOR(S): Gastrock, William H.; Pankavich, John A.; Carter, Spencer Douglas
PATENT ASSIGNEE(S): American Cyanamid Co., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3957978	A	19760518	US 1975-550064	19750214

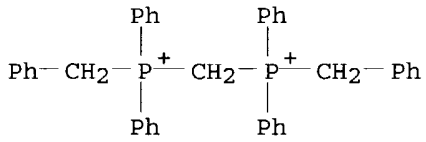
PRIORITY APPLN. INFO.: US 1975-550064 19750214

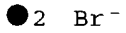
AB The title compds. Ph2P+R1CHR2P+Ph2R1.2X-, Ph2PR1:CR2P+Ph2R1 or (Ph2P+R1CR2:PPh2R1) (R = Ph, R1 = Ph or substituted Ph, R2 = alkyl, halogen, H, Ph, etc.; X = halogen) prepared by reacting a phosphine, a haloalkyl, and a phosphate ester, or a haloalkyl with a carbodiphosphorane, are used to control helminths in domestic and farm animals. Thus, methylenebis(triphenylphosphonium) dibromide [14529-09-0] controlled large number of helminths in sheep at 15-30 mg/kg.

IT **7302-15-0P 14529-09-0P 60198-19-8P**
60198-20-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); **PREP (Preparation)**; USES (Uses)
(preparation and anthelmintic activity of)

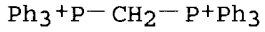
RN 7302-15-0 CAPLUS

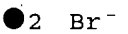
CN Phosphonium, methylenebis[diphenyl(phenylmethyl)-, dibromide (9CI) (CA INDEX NAME)



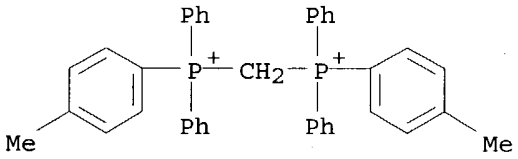


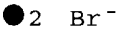
RN 14529-09-0 CAPLUS
CN Phosphonium, methylenebis[triphenyl-, dibromide (8CI, 9CI) (CA INDEX NAME)



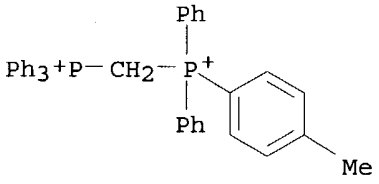


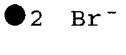
RN 60198-19-8 CAPLUS
CN Phosphonium, methylenebis[(4-methylphenyl)diphenyl-, dibromide (9CI) (CA INDEX NAME)





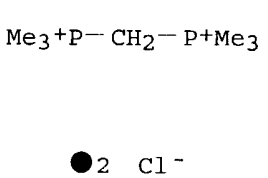
RN 60198-20-1 CAPLUS
CN Phosphonium, [[(4-methylphenyl)diphenylphosphonio]methyl]triphenyl-, dibromide (9CI) (CA INDEX NAME)





L24 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1975:593457 CAPLUS
DOCUMENT NUMBER: 83:193457
TITLE: Bis(trimethylphosphoranylidene)methane,

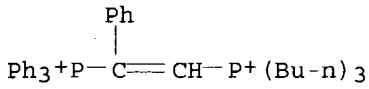
(CH3)3PCP(CH3)3
AUTHOR(S): Gasser, Oswald; Schmidbaur, Hubert
CORPORATE SOURCE: Anorg.-Chem. Lab., Tech. Univ. Muenchen, Munich, Fed. Rep. Ger.
SOURCE: Journal of the American Chemical Society (1975), 97(21), 6281-2
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title compound, which is the first peralkylated P bis-ylide, was synthesized from a Me3P:CHPMe3F precursor. This fluorophosphorane, a fluxional mol. that undergoes rapid F exchange, is prepared from Me3PF2 and Me3P:CHSiMe3 with elimination of Me3SiF.
IT **57432-17-4P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)
RN 57432-17-4 CAPLUS
CN Phosphonium, methylenebis[trimethyl-, dichloride (9CI) (CA INDEX NAME)

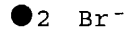


$Me_3{}^+P-CH_2-P^+Me_3$

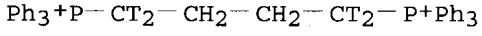
●2 Cl^-

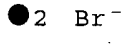
L24 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1972:461129 CAPLUS
DOCUMENT NUMBER: 77:61129
TITLE: Nucleophilic substitution at an acetylenic carbon. Mechanistic and synthetic study of the reactions of phosphines with haloacetylenes
AUTHOR(S): Dickstein, Jerome I.; Miller, Sidney I.
CORPORATE SOURCE: Dep. Chem., Illinois Inst. Technol., Chicago, IL, USA
SOURCE: Journal of Organic Chemistry (1972), 37(13), 2168-75
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A synthetic route to ethynylphosphonium salts from haloacetylenes, phenylhaloacetylenes, but not alkylhaloacetylenes, is described. These salts are electrophiles; when phenylethynyltriphenylphosphonium bromide is treated with Bu3P in MeCN, the α,β-bis(tributylphosphonium)styrene dibromide is formed. Both the element effect, k(Cl) > k(Br), and the results of scavenging expts. with MeOH provide evidence for mechanistic alternatives. Although Bu3N attacks the Br of phenylbromoacetylene exclusively, attacks on halogen and the terminal C atom appear to be competitive in the other systems. The general order of reactivity in substitution at C by phosphine nucleophiles is sp3 .apprx. sp > sp2.
IT **34387-66-1P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)
RN 34387-66-1 CAPLUS
CN Phosphonium, tributyl[2-phenyl-2-(triphenylphosphonio)ethenyl]-, dibromide (9CI) (CA INDEX NAME)





L24 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1971:135334 CAPLUS
DOCUMENT NUMBER: 74:135334
TITLE: Biosynthesis of terpenes and steroids. IV. Specific hydride shifts in the biosynthesis of lanosterol and β-amyrin
AUTHOR(S): Barton, Derek H. R.; Mellows, G.; Widdowson, David A.; Wright, John Jessen
CORPORATE SOURCE: Dep. Chem., Imp. Coll., London, UK
SOURCE: Journal of the Chemical Society [Section] C: Organic (1971), (6), 1142-8
CODEN: JSOOAX; ISSN: 0022-4952
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The hydride shifts observed in the cyclization of 2,3-epoxysqualene-11,14-3H (I) to lanosterol in yeast (Saccharomyces cerevisiae), and to β-amyrin in peas (Pisum sativum) supported the Ruzicka-Eschenmoser hypothesis (1955) and not a plausible alternative which was considered. The synthesis of I by 2 routes was described.
IT **32562-57-5P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)
RN 32562-57-5 CAPLUS
CN Phosphonium, tetramethylene-1,1,4,4-t4-bis[triphenyl-, dibromide (8CI) (CA INDEX NAME)





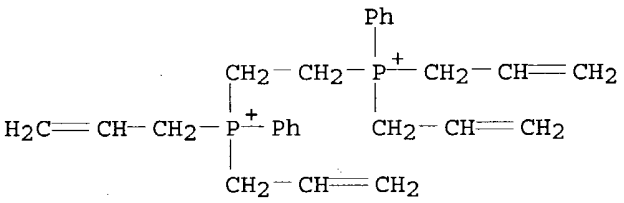
L24 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:509849 CAPLUS
DOCUMENT NUMBER: 73:109849
TITLE: Organic phosphorus compounds. 65. The selective elimination of allyl groups from allylphosphonium, -arsonium, and -sulfonium salts and from allyl sulfones by cyanolysis
AUTHOR(S): Horner, Leopold; Hofer, Wolfgang; Ertel, Ingeborg; Kunz, Horst
CORPORATE SOURCE: Inst. Org. Chem., Univ. Mainz, Mainz, Fed. Rep. Ger.
SOURCE: Chemische Berichte (1970), 103(9), 2718-28
CODEN: CHBEAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: German
AB KCN cleaved Ph3P+CH2CH:CRR1Br- (where R = H, Me, or Ph and R1 = H), Ph3As+CH2CH:CRR1 Br- (where R = H, Me, or Ph and R1 = H or Me), or Me2S+CH2CH:CH2Br- to give the corresponding methacrylonitriles and

tertiary phosphines, tertiary arsines, or Me2S, resp. Phosphonium and arsonium salts with 4 different ligands, e.g. Ph(PhCH2)As+(CH2CH:CH2)MeCl-, can be prepared by alternate cyanolysis and quaternization, starting from e.g. PhAsCl2 and CH2:CHCH2MgCl. Reaction of RSO2CH2CH:CH2 (where R = Et, Ph, p-O2NC6H4, or p-MeOC6H4) with KCN yielded CH2:CMeCN and RSO2H.

IT **28975-49-7P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 28975-49-7 CAPLUS

CN Phosphonium, ethylenebis[diallylphenyl-, dibromide (8CI) (CA INDEX NAME)



2 Br^-

L24 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1970:499021 CAPLUS

DOCUMENT NUMBER: 73:99021

TITLE: Reaction of tetramethyldiphosphine with butadiene

AUTHOR(S): Hewertson, Warren; Taylor, Ian Charles

CORPORATE SOURCE: Petrochem. and Polym. Lab., Imp. Chem. Ind. Ltd., Runcorn, UK

SOURCE: Journal of the Chemical Society [Section] C: Organic (1970), (14), 1990-2
CODEN: JSOOAX; ISSN: 0022-4952

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 73:99021

AB cis- and trans-1,4-Bis(dimethylphosphino)-2-butene were prepared by the 1,4-addition of tetramethyldiphosphine to butadiene catalyzed by azobisisobutyronitrile. A reaction scheme involving a dimethylphosphino radical addition and an allyl radical intermediate is discussed. Polymeric complexes of both isomers with Pt(II) were prepared, and were separated by use of their solubility difference.

IT **29125-02-8P 29125-03-9P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)

RN 29125-02-8 CAPLUS

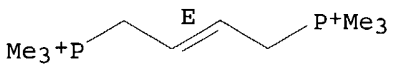
CN Phosphonium, 2-butenylenebis[trimethyl-, diiodide, (Z)- (8CI) (CA INDEX NAME)

Double bond geometry as shown.

2 I^-

RN 29125-03-9 CAPLUS
CN Phosphonium, 2-butenylenebis[trimethyl-, diiodide, (E)- (8CI) (CA INDEX NAME)

Double bond geometry as shown.



●2 I⁻

L24 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1970:132860 CAPLUS
DOCUMENT NUMBER: 72:132860
TITLE: Phosphocholine 2,6-xylyl ether bromide: proton-phosphorus coupling constants and preliminary pharmacological assessment
AUTHOR(S): Clark, Edward Raymond; Hughes, Iwan Elfan
CORPORATE SOURCE: Dep. Pharmacol., Sch. Med., Leeds, UK
SOURCE: Journal of Pharmacy and Pharmacology (1970), 22(4), 279-83
CODEN: JPPMAB; ISSN: 0022-3573
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Phosphocholine 2,6-xylyl ether bromide [P,P,P-trimethyl-2-(2,6-xylyloxy)ethylphosphonium bromide], was synthesized by reacting 2-(2,6-xylyloxy)ethyl bromide with a solution of Me3P in phenol, but ethylenebis(tri-methylphosphonium bromide), 1,2-di(2,6-xylyloxy)ethane and 2,6-xylenol were the only reaction products identified when ether was used as solvent. The 2JPH and 3JPH coupling consts. for these phosphonium salts were determined Although the phosphocholine xylyl ether blocks the Finkleman preparation in concns. of 2-3 + 10-5 g/ml, this blockade does not have all the characteristics of the adrenergic neuron blockade produced by xylo-choline.
IT **26802-56-2P**
RL: SPN (Synthetic preparation); **PREP (Preparation)**
(preparation of)
RN 26802-56-2 CAPLUS
CN Phosphonium, ethylenebis[trimethyl-, dibromide (8CI) (CA INDEX NAME)

$Me_3{}^+P-CH_2-CH_2-P^+Me_3$

●2 Br⁻

=> file beilstein

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	50.26	440.16
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-6.93	-6.93

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FILE 'BEILSTEIN' ENTERED AT 13:48:18 ON 05 MAY 2004
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FILE RELOADED ON OCTOBER 20, 2002
FILE LAST UPDATED ON MARCH 30,2004

FILE COVERS 1771 TO 2003.
*** FILE CONTAINS  8,932,479 SUBSTANCES ***

>>> PLEASE NOTE: Reaction data and substance data are stored in
    separate documents and can not be searched together in one
    query.
    Reaction data for BEILSTEIN compounds may be displayed
    immediately with the display codes PRE (preparations) and REA
    (reactions). A substance answer set retrieved after the search
    for a chemical name, a molecular formula or a structure search
    for example can be restricted to compounds with available
    reaction information by concatenation with PRE/FA, REA/FA or
    more general with RX/FA. The BEILSTEIN Registry Number (BRN)
    is the link between a BEILSTEIN compound and belonging reactions.
    For more detailed reaction searches BRNs can be selected from
    substance answer sets and searched in the next step as reaction
    partner BRNs - Reactant (RX.RBRN) or Product BRN (RX.PBRN).
    After a search for reaction details substance documents
    associated with reactants or products may be retrieved by
    searching RX.PBRNs or RX.RBRNs as BRNs. <<<


>>> FOR SEARCHING PREPARATIONS SEE HELP PRE  <<<

*********************************************************************
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.               *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE  *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE         *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.                       *
* FOR PRICE INFORMATION SEE HELP COST                               *
*********************************************************************

=> d his

     (FILE 'HOME' ENTERED AT 13:22:17 ON 05 MAY 2004)

     FILE 'REGISTRY' ENTERED AT 13:22:25 ON 05 MAY 2004
L1             STRUCTURE UPLOADED
L2           0 S L1
L3           4 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 13:23:17 ON 05 MAY 2004
L4           0 S L3
L5           0 S L3

     FILE 'REGISTRY' ENTERED AT 13:23:38 ON 05 MAY 2004
L6             STRUCTURE UPLOADED
L7           0 S L6
L8             STRUCTURE UPLOADED
L9          50 S L8
L10       6662 S L8 FULL
L11       2855 S L10 NOT M/ELS
L12       1232 S L11 NOT O/ELS
L13        582 S L12 NOT  DIYL?
L14        420 S L13 NOT S/ELS
L15        319 S L14 NOT N/ELS
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Update Date (DUPD): 2004/01/21

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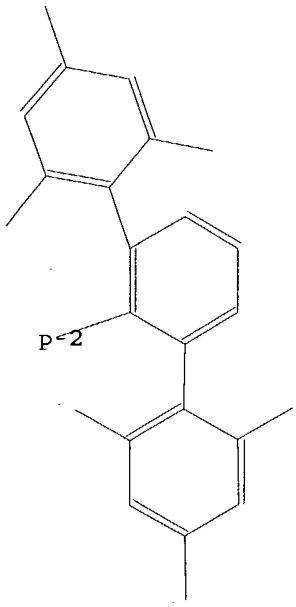
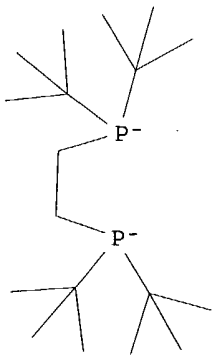
FBRN 9518207
FMF C24 H25 P



CM 2

FBRN 9504812
FMF C18 H42 P2



CM 3

FBRN 4921309
FMF Ni

Field Availability:

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BRN	Beilstein Records	1
CN	Chemical Name	1
AUN	Autonomname	1
LSF	Linearized Structure Formula	1
FMF	Fragment Molecular Formula	3
MF	Molecular Formula	1
FW	Formular Weight	3
FBRN	Fragment BRN	3
LN	Lawson Number	3
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
ED	Entry Date	1
UPD	Update Date	1

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	2
RXREA	Substance is Reaction Reactant	2

```
=> d his

     (FILE 'HOME' ENTERED AT 13:22:17 ON 05 MAY 2004)

     FILE 'REGISTRY' ENTERED AT 13:22:25 ON 05 MAY 2004
L1             STRUCTURE UPLOADED
L2           0 S L1
L3           4 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 13:23:17 ON 05 MAY 2004
L4           0 S L3
L5           0 S L3

     FILE 'REGISTRY' ENTERED AT 13:23:38 ON 05 MAY 2004
L6             STRUCTURE UPLOADED
L7           0 S L6
L8             STRUCTURE UPLOADED
L9          50 S L8
L10       6662 S L8 FULL
L11       2855 S L10 NOT M/ELS
L12       1232 S L11 NOT O/ELS
L13        582 S L12 NOT  DIYL?
L14        420 S L13 NOT S/ELS
L15        319 S L14 NOT N/ELS

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     FILE 'REGISTRY' ENTERED AT 13:44:00 ON 05 MAY 2004
L16          1 S   C26 H36 P2/MF AND L15
L17        314 S L15 NOT SI/ELS
L18        219 S L17 AND 2/P
L19        159 S L18 NOT B/ELS
L20        147 S L19 NOT YLIDE?
L21        143 S L20 NOT VINYLENE?
L22         16 S L21 NOT X/ELS
L23        127 S L21 NOT L22

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L24           45 S L23/PREP

     FILE 'BEILSTEIN' ENTERED AT 13:48:18 ON 05 MAY 2004
L25           17 S L1 FULL
L26           17 S L25 NOT M/ELS

=> s l26 not ni/els
          3615 NI/ELS
L27           12 L26 NOT NI/ELS

=> d ide

L27  ANSWER 1 OF 12 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

     Beilstein Records (BRN):          8662097
     Molec. Formula (MF):              C24 H48 B2 P2
     Molecular Weight (MW):            420.21
     Lawson Number (LN):               16731, 3762, 3761
     File Segment (FS):                Stereo compound
     Compound Type (CTYPE):            isocyclic
     Constitution ID (CONSID):         7338743
     Tautomer ID (TAUTID):             8137991
     Entry Date (DED):                 2001/01/30
     Update Date (DUPD):               2001/01/30
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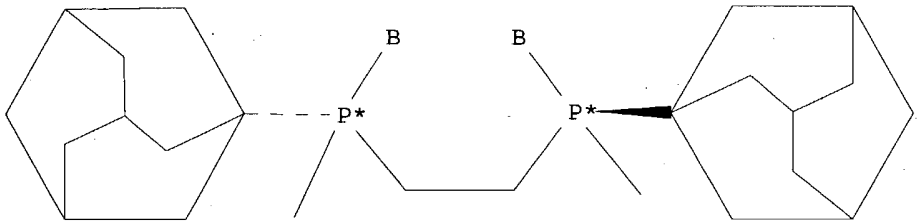


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   Field Availability:

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     MF        Molecular Formula                                    1
     FW        Formular Weight                                      1
     LN        Lawson Number                                        3
     FS        File Segment                                         1
     CTYPE     Compound Type                                        1
     CONSID    Constitution ID                                      1
     TAUTID    Tautomer ID                                          1
     ED        Entry Date                                           1
     UPD       Update Date                                          1

   This substance also occurs in Reaction Documents:

     Code      Name                                       Occurrence
     ========================================================
     RX        Reaction Documents                                   1
     RXREA     Substance is Reaction Reactant                       1


=> s l27 not b/els
         44799 B/ELS
```
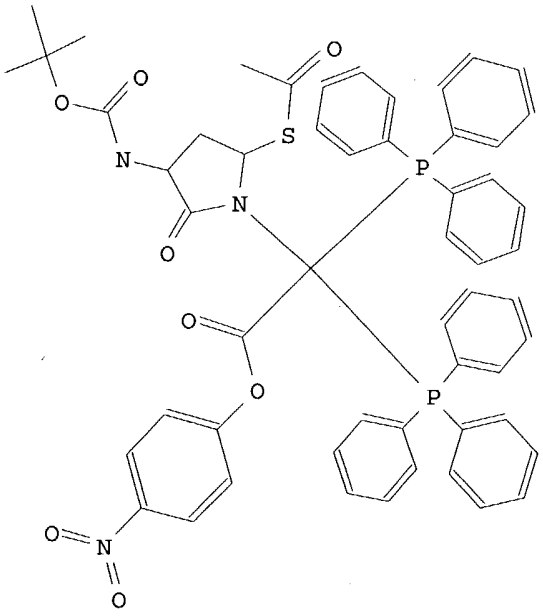

L28 8 L27 NOT B/ELS

=> d ide

L28 ANSWER 1 OF 8 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

Beilstein Records (BRN):	5226532
Chemical Name (CN):	(5-acetylsulfanyl-3-tert-butoxycarbonylamino-2-oxo-pyrrolidin-1-yl)-bis-(triphenyl-λ5-phosphanyl)-acetic acid 4-nitro-phenyl ester
Autonom Name (AUN):	(5-acetylsulfanyl-3-tert-butoxycarbonylamino-2-oxo-pyrrolidin-1-yl)-bis-(triphenyl-λ5-phosphanyl)-acetic acid 4-nitro-phenyl ester
Molec. Formula (MF):	C55 H53 N3 O8 P2 S
Molecular Weight (MW):	978.05
Lawson Number (LN):	27779, 16731, 5220, 1762, 1517, 1158, 318
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	4678041
Tautomer ID (TAUTID):	5057745
Beilstein Citation (BSO):	6-22
Entry Date (DED):	1992/08/28
Update Date (DUPD):	1992/08/28



Field Availability:

Code	Name	Occurrence
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CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1

LN	Lawson Number	7
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
ED	Entry Date	1
UPD	Update Date	1

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	2
RXREA	Substance is Reaction Reactant	1
RXPRO	Substance is Reaction Product	1

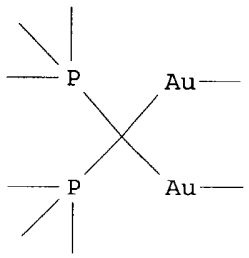
```
=> s l28 not n/els
      5757375 N/ELS
L29           5 L28 NOT N/ELS

=> s l29 not o/els
      7772310 O/ELS
L30           3 L29 NOT O/ELS

=> d ide
```

L30 ANSWER 1 OF 3 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

Beilstein Records (BRN):	3929757
Chemical Name (CN):	Bis(methylgold)-bis(trimethylphosphonio)-methandiid
Molec. Formula (MF):	C9 H26 Au2 P2
Molecular Weight (MW):	590.18
Lawson Number (LN):	3811, 3809, 3761
Compound Type (CTYPE):	acyclic
Constitution ID (CONSID):	3533001
Tautomer ID (TAUTID):	3766979
Beilstein Citation (BSO):	5-04
Entry Date (DED):	1991/03/19
Update Date (DUPD):	1991/09/02



Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
CN	Chemical Name	1

LSF	Linearized Structure Formula	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	3
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
ED	Entry Date	1
UPD	Update Date	1
CDISP	Compound Disposition	1
NMR	Nuclear Magnetic Resonance	1

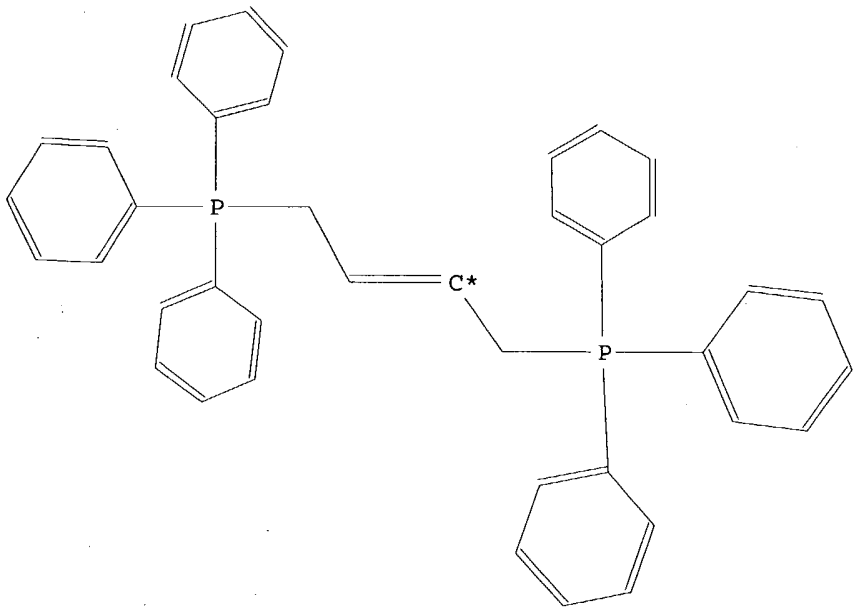
This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	2
RXREA	Substance is Reaction Reactant	1
RXPRO	Substance is Reaction Product	1

=> d ide 2

L30 ANSWER 2 OF 3 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

Beilstein Records (BRN):	2923799
Molec. Formula (MF):	C40 H38 P2
Molecular Weight (MW):	580.69
Lawson Number (LN):	16731, 3764
Compound Type (CTYPE):	isocyclic
Constitution ID (CONSID):	2711589
Tautomer ID (TAUTID):	2884979
Beilstein Citation (BSO):	5-16
Entry Date (DED):	1989/07/11
Update Date (DUPD):	1990/02/07



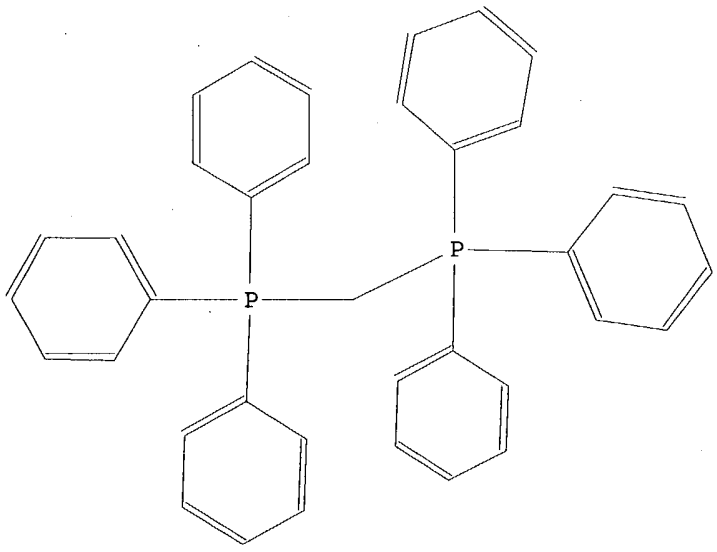
Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	2
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
ED	Entry Date	1
UPD	Update Date	1
FINFO	Further Information	1

=> d ide 3

L30 ANSWER 3 OF 3 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

Beilstein Records (BRN):	2920541
Chemical Name (CN):	Bis-triphenylphosphonio-methan
Molec. Formula (MF):	C37 H34 P2
Molecular Weight (MW):	540.62
Lawson Number (LN):	16731, 689
Compound Type (CTYPE):	isocyclic
Constitution ID (CONSID):	2708410
Tautomer ID (TAUTID):	2884273
Beilstein Citation (BSO):	5-16
Entry Date (DED):	1989/07/11
Update Date (DUPD):	1991/03/25



Field Availability:

Code	Name	Occurrence

BRN	Beilstein Records	1
CN	Chemical Name	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	2
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
ED	Entry Date	1
UPD	Update Date	1
CDER	Chemical Derivative	1
FINFO	Further Information	1

=>